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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/185,550

11/04/1998

MINORU SEKIGUCHI

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08/14/2006

STAAS & HALSEY LLP

SUITE 700

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EXAMINER

HAN, QI

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/185,550	Applicant(s) SEKIGUCHI, MINORU	
	Examiner Qi Han	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 13, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/11/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement submitted on 07/11/2006 have been considered by the examiner (see attached PTO-1449).

Response to Amendment

3. This communication is responsive to the applicant's amendment dated 07/11/2006. The applicant(s) amended claims 1-2, 13 and 15, and added new claim 16 (see the amendment: pages 2-7).
4. Regarding new added claim 16, it is noted that this claim belongs to invention Group II that had been required for election/restriction (see detail in the previous office action filed 08/27/2002). It is also reminded that the applicant had elected invention Group I without traverse, and cancelled the non-elected claims of invention Group II (see detail in the response paper filed on 09/19/2002). Therefore, based on the same reason as described in the previous office action made by the examiner and in the previous response (to the election/restriction requirement) made by the applicant as stated above, claim 16 is treated as a non-elected claim

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and is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention Group II, there being no allowable generic or linking claim.

Response to Arguments

5. Applicant's arguments filed on 07/11/2006 with respect to the rejection of claims 1-3, 13 and 15 under 35 USC 102/103 (the amendment-remarks: page 5), have been fully considered but are moot in view of the new ground(s) of rejection, since the amended claims introduce new issue and/or change the scope of the claims (see detail in the claim rejection below).

Claim Rejections - 35 USC § 103

6. Claims 1-3, 13 and 15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over DAVIS et al. (5,177,685) hereinafter referenced as DAVIS in view of WACHTEL (us 5,870,701).

As per **claim 1**, DAVIS teaches automobile navigation system using real time spoken driving instructions (title), including using (processing) data from a position sensor (col. 1, line 66), comprising:

"storing data groups in a database" and "word representing a characteristic of a corresponding data group is attached to each of said data group, said data groups being obtained by classifying numerical inputs from said sensor directly of after processing" (col. 2, lines 19-43, 'the map database...includes features that affect speed of travel...', 'positions are...stored in the map database...', 'driving instructions generated ...the two issues for spoken directions are what to say and when to say it (data groups)', 'large taxonomy of inter-section types

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(corresponding to database and including classifying)', 'chooses verbs (words) to indicate (corresponding to attach) the kind (data group) of intersection', 'refer to landmarks and timing ...'; col. 11, line 42 to col. 12, line 31, 'position finding system determine position directly by detecting an external signal' and 'position keeping system estimated the current position from knowledge of an earlier position and the change in position', 'measure the amount of turning...distances,...difference in rotation (numerical inputs)', 'position sensor...includes a displacement sensor and a direction sensor' (classifying inputs));

"outputting" "word attached to the corresponding data group among the data groups stored in said database if the corresponding data group is found to be similar to sensor input, when the sensor input is received", (col. 2, lines 35-67, 'spoken direction', 'instruction', 'speech, especially synthetic speech, as an output media', 'utterances be repeatable on demand', 'construct a new utterance with the same intent, but not necessarily the same words, as a previous message', wherein the speech is necessarily associated with (attached to) the database data groups, such as 'chooses verbs' or 'refer to landmarks'; col. 15, lines 61-64, 'instruction-vp—generate a verb phrase' and 'instruction-np—generate a noun phrase' (read on word attached to the corresponding data groups and are similar to sensor input respectively));

"temporarily storing input data from said sensor as data of a new data group after classifying said input data when it is determined that said input data does not belong to any of said groups classified in said database" and "attaching a word to said data of said new group temporarily stored to store said data of new group in said database" (col. 20, lines 54-67, 'able to model the uncertainty of a position', 'errors ...occur if the database is somewhat out date', 'acquires a model of the user automatically...learn the driver's reaction time (necessarily storing

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it as an input data) by measuring the time', which suggests that at least one input data is classified as reaction time (in a new data group) and is temporarily stored for later use in processing and/or outputting the related spoken instruction).

DAVIS does not explicitly teach that the processed and/or attached word is "a (the) natural language word". However, it is noted that DAVIS discloses 'discourse generator (col. 3, line 22) and 'description function to generate a description of the action...takes inputs specifying the size of the description (brief or long), the tense (past, present or future), and the reference position' (col. 15, lines 26-67), and providing the example sentences for the instructions (col. 16, lines 9-14 and (col. 19, lines 48-50) that are obviously corresponded to natural language words, which suggests that the DAVIS' system has capability of implementing functionality as claimed. Therefore, one having ordinary skill in the art at the time the invention was made would have found it obvious to provide discourse generator with specific instructions associating natural language words, as taught by DAVIS himself, for the purpose of providing specific and/or sufficient direction and increasing the driver's confidence for user using the system (DAVIS: col. 15, lines 40-50).

Further, it is noted that DAVIS does not explicitly teach that "a provisional code is temporally attached to a data group stored in the database without a word until a word is provide". However, the feature of providing temporary attached code that associated with certain data group (category) for processing word is well known in the art as evidenced by WACHTEL who, in the same field of endeavor, discloses 'control signal processing method and apparatus having natural language interface capabilities' (title), comprising using 'search code and codes (provisional code) depending upon (attached) the category (data group) of the current

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word and storing, with each code, the value of a selected argument of the meaning of the current word' and 'removing ...certain previously stored search codes (means that the codes are temporally attached)' (col. 10, lines 27-44) (also see Table 2 and col. 11-12), which suggests that the system has capability of implementing functionality as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify DAVIS by providing temporary attached code associating data group (category) for processing word(s), as taught by WACHTEL, for the purpose (motivation) of offering convenient form for further processing and/or enabling the operator to input switching instruction in natural language (WACHTEL: abstract).

In addition, based on broadest reasonable interpretation of the claimed limitation in light of the specification (page 17, lines 10-14), it is noted that DAVIS further discloses that his invention is a 'computer apparatus' having '(computer) programs' and using 'database' (abstract and col. 1, lines 6-67), which necessarily or inherently include providing default codes/values (interpreted as provisional code) for certain variables in data structure of the programs or fields/records of database tables before obtaining the corresponding input word, which suggests that DAVIS' system alone may also satisfy the claimed limitation, in a manner of necessity and/or inherence.

As per **claim 2**, it recites a sensor data processing apparatus with means-plus functions. The rejection is based on the same reason described for claim 1, because the rejection for claim 1 covers the same or similar limitations or equivalent functionalities as claim 2, wherein, the data received/derived from 'the position sensor' (DAVIS: col. 11, line 42 to col. 12, line 67) corresponds to the claimed "state or state change", and 'instruction-vp—generate a verb phrase'

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and ‘instruction-np—generate a noun phrase’ (DAVIS: col. 15, lines 61-64) corresponds to the claimed “dynamic characteristic” and “static characteristic”.

As per **claim 3** (depending on claim 2), DAVIS further teaches “status judging means for judging a status using a certain word attached to a group”, (col. 14, line 24 to col. 16, lines 67, ‘the acts in the working prototypes...(including judging a status)’, ‘short description’, ‘long description’, ‘verb phrases’, ‘specifying direction with landmark’, ‘a cue is expressed either as a full sentence ...or a proposed reposition phrase’).

As per **claim 13**, it recites a computer-readable storage medium. The rejection is based on the same reason described for claim 1, because the rejection for claim 1 covers the same or similar limitations or equivalent functionalities as claim 13, wherein, the data received from ‘the position sensor’ is read on the claimed “unrelated to language”.

As per **claim 15**, it recites a method. The rejection is based on the same reason described for claim 1, because the rejection for claim 1 covers the same or similar limitations or equivalent functionalities as claim 15.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the

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THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Please address mail to be delivered by the United States Postal Service (USPS) as follows:

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (571) 272-7604. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (571) 272-7602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh
August 8, 2006


RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER